UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 7,009,931 B2
APPLICATION NO. : 09/751881
DATED : March 7, 2006
INVENTOR(S) : Jianglei Ma et al.

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

In the Summary of Invention:

Column 2, line 33: delete "synchronization"
       insert --synchronizing--

Column 3, line 10: delete "course"
       insert --coarse--

In the Detailed Description of the Invention:

Column 7, line 54: delete "k min"
       insert -- k_{min} --

Column 7, line 57: insert -- $l \in [-N_{max}, N_{min}]$, *and* --

Column 7, line 57: delete " $l \in [-N_{max}, N_{min}]$, *and* "
       insert -- $k \in [-N_{max}, N_{min}]$, *and* --

In the Claims:

Claim 1, Column 8, line 48: delete "received signal; and"

Claim 1, Column 8, line 42: delete "synchronization"
          insert --synchronizing--

Claim 1, Column 8, line 47: insert --received signal; and-- after words
"correlator algorithm to said"

Claim 2, Column 8, line 56: delete "$\rho/2$"

Claim 2, Column 8, line 59: insert --$\rho/2$-- in front of the words " $\sum\limits_{l=0}^{N_{symbol}-1}$ "

Claim 2, Column 8, line 65: delete " X_{coarse}^{i} "
          insert -- x_{coarse}^{i} --

Claim 2, Column 8, line 67: delete " r_{t}^{*} "

          insert -- r_{t}^{t} --

Claim 3, Column 9, line 34: delete " X_{fine} "
          insert -- x_{fine} --

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In the Claims (cont.):

Claim 3, Column 9, line 35: delete " $X \in [X_{coarse} - N_{fine}, X_{coarse} + N_{fine}];$ "
insert -- $x \in [x_{coarse} - N_{fine}, x_{coarse} + N_{fine}];$ --

Claim 8, Column 10, line 14: delete "index is determined"
insert --index Z is determined--

Claim 8, Column 10, line 23: delete " $l \in [-N_{max}, N_{max}];$ "
insert -- $k \in [-N_{max}, N_{max}];$ --

Claim 8, Column 10, line 26: delete "frequency the"
insert --the frequency--

Claim 8, Column 10, line 28: delete "K_{min}"
insert --k_{min}--

Claim 13, Column 10, line 53: delete "synchronization"
insert --synchronizing--

Claim 14, Column 11, line 5: delete "$\rho/2$"

Claim 14, Column 11, line 8: insert -- $\rho/2$ -- in front of the words

" $\displaystyle\sum_{l=0}^{N_{symbol}-1}$ "

Claim 14, Column 11, line 15: delete " $X_{coarse}{}^{i}$ "
insert -- $x_{coarse}{}^{i}$ --

Claim 14, Column 11, line 17: delete " $r^{*}{}_{t}$ "

insert -- r_{t}^{*} --

Claim 15, Column 11, line 49: delete " X_{fine} "
insert -- x_{fine} --

Claim 15, Column 11, line 50: delete " $X \in [X_{coarse} - N_{fine}, X_{coarse} + N_{fine}];$ "
insert -- $x \in [x_{coarse} - N_{fine}, x_{coarse} + N_{fine}];$ --

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In the Claims (cont.):

Claim 18, Column 12, line 16:   delete "sub-carrier index"
insert --sub-carrier index Z--

Claim 18, Column 12, line 21:   delete " PN_l^* "

insert -- PN_l^* --

Claim 18, Column 12, line 25:   delete " $l \in [-N_{max}, N_{max}];$ "
insert -- $k \in [-N_{max}, N_{max}];$ --

Claim 18, Column 12, line 28:   delete "K_{min}"
insert --k_{min}--

Claim 23, Column 12, line 56:   delete "synchronization"
insert --synchronizing--

Claim 24, Column 13, line 18:   delete " X_{coarse}^i"
insert -- x_{coarse}^i --

Claim 24, Column 13, line 20:   delete "r^*_l"

insert -- r_l^* --

Claim 25, Column 13, line 51:   delete " X_{fine} "
insert -- x_{fine} --

Claim 25, Column 13, line 52:   delete " $X \in [X_{coarse} - N_{fine}, X_{coarse} + N_{fine}];$"
insert -- $x \in [x_{coarse} - N_{fine}, x_{coarse} + N_{fine}];$ --

Claim 28, Column 14, line 27:   delete " $R_{train} \int_0^0 d^0$ "

insert -- R_{train} --

Claim 28, Column 14, line 30:   delete " $l \in [-N_{max}, N_{max}];$ "
insert -- $k \in [-N_{max}, N_{max}];$ --

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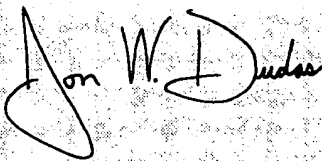INVENTOR(S)   : Jianglei Ma et al.

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In the Claims (cont.):

Claim 28, Column 14, line 33:   delete "K_{min}"
                                            insert --k_{min}--

Signed and Sealed this

Fourteenth Day of November, 2006